

REMARKS

Claims 1-6, 8-15, 19 and 20 are pending in the present application.

Claims 3-6 are withdrawn from consideration.

Claims 1, 2, 8-15, 19 and 20 are rejected under 35 U.S.C. §103(a) as allegedly unpatentable over WO 02/24974 taken in view of U.S. 5,114,757 to Linde et al. Applicants respectfully traverse this rejection.

As admitted in the Office Action at page 3, WO 02/24974 does not teach a silsesquioxane as a primer layer. Also WO 02/24974 does not suggest a silsesquioxane as a primer layer because it is totally silent on the use of such compounds. In contrast, WO 02/24974 use wetting agents such as glycols, glycol ethers, glycol ether acetates and poly(alkylene oxide) polymers. See page 10, lines 7-27.

Linde et al. do not make up for the deficiencies of WO 02/24974. Linde et al. do not teach or suggest a method of treating a metal surface comprising priming a roughened metal surface with a liquid primer composition comprising one or more silsesquioxanes and an organic polymer, an organic oligomer, an organic monomer, or mixtures thereof as recited in present claims 1 and 19.

In contrast, Linde et al. apply a composition containing silsesquioxane precursors to a metal surface and heat the solution to partially cure the precursors. Such precursors are aminoalkoxysilane monomers, an arylalkoxysilane monomer or an arylsilazane monomer, not a silsesquioxane as in the presently claimed invention. See col. 1, line 60 to 67 and col. 4, lines 19-24. The presently claimed method does not apply silsesquioxane precursors to a metal and partially cure them. The composition which primes the roughened metal of the presently claimed invention already contains the silsesquioxanes, not precursors.

Further, Linde et al. perform a second heating step where a polyimide precursor is applied to the metal with the partially cured precursors and then again applies heat to simultaneously form a layer of cured silsesquioxane copolymers and a polyimide layer. See col. 1, line 65 to col. 2, line 2, Abstract and col. 4, line 67 to col. 5, line 4. Moreover, Linde et al. teach that to form strong bonds between cured silsesquioxane copolymers and polyimide layers curing is necessary. See col. 5, lines 22-32. The presently claimed invention does not have such curing steps.

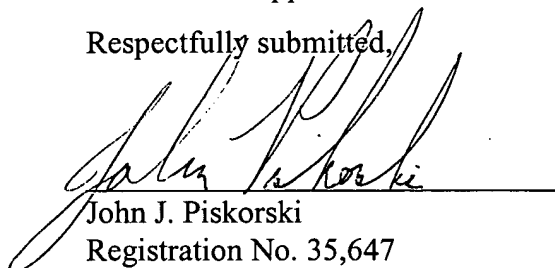
Additionally, there would have been no reason or motivation for a person of skill in the art to substitute the priming method disclosed in WO 02/24974 with the curing method disclosed in Linde et al. WO 02/24974 does not disclose any type of curing step to join a polymer layer to a metal. In contrast, it uses wetting agents such as glycols, glycol ethers, glycol ether acetates and poly(alkylene oxide)polymers to form a bond between the polymer material and a metal surface. See page 10, lines 7-27. Silsesquioxanes are not included in the priming step nor even disclosed in WO 02/24974. WO 02/24974 eliminates the need for a curing step as well as silsesquioxanes or silsesquioxane precursors by using the glycols, glycol ethers, glycol ether acetates and poly(alkylene oxide) polymers. Even if a person of skill in the art substituted the curing process disclosed in Linde et al. for the glycols, glycol ethers, glycol ether acetates and poly(alkylene oxide) polymers of WO 02/24974, the presently claimed invention is still patentable over the applied documents for the reasons discussed above.

Applicants respectfully request withdrawal of the rejection of claims 1, 2, 8-15 and 19-20 under 35 U.S.C. §103(a) as allegedly unpatentable over WO 02/24974 taken in view of U.S. 5,114,757 to Linde et al.

Favorable consideration and allowance of claims 1, 2, 8-15 and 19-20 are earnestly solicited.

Should the Examiner have any questions concerning this response or should she believe this application is for any reason not yet in condition for allowance, she is respectfully requested to telephone the undersigned below to expedite allowance of this application.

Respectfully submitted,



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